

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for managing client transactions requesting access to a shared resource, comprising:
logging client transactions in a log file from multiple clients;
determining one of the clients ~~client~~ transmitting data at a transmission rate less than a threshold transmission rate; and
denying subsequent transactions from the determined client access to the shared resource to provide additional space in the log file for new transactions from ~~additional~~ the clients, other than the determined client, requesting access to the resource.
2. (Currently Amended) The method of claim 1, further comprising:
removing all pending ~~transaction~~ transactions of the determined client from the log file.
3. (Currently Amended) The method of claim 1, wherein the clients submit transactions requesting the resource during a session that the clients initiate, further comprising:
determining one client session active longer than a threshold time period, wherein the determination of whether the client data transmission rate is less than the threshold transmission rate is made for the determined client whose session is active longer than the threshold time period, and wherein subsequent transactions are denied access to the shared resource for the client having the session active longer than the threshold period of time and having the data transmission rate less than the threshold transmission rate.
4. (Currently Amended) The method of claim 1, further comprising:
determining one pending transaction whose access to the resource has completed; and

removing the determined pending transaction from the log file.

5. (Original) The method of claim 4, further comprising:
determining one client that has transmitted a threshold amount of data, wherein the determination and removal from the log file of pending transactions whose access to the resource has completed is made for all the pending transactions of the determined client that has transmitted the threshold amount of data.

6. (Original) The method of claim 1, wherein an oldest pending transaction logged in the log file is capable of preventing new transactions from being added to the log file.

7. (Currently Amended) The method of claim 1, further comprising:
providing a first pointer pointing to an oldest pending transaction in the log file that is capable of preventing new transactions from being added to the log file; and
if one of the removed transactions is the oldest pending transaction in the log file, then adjusting the first pointer to point to [the] a next oldest pending transaction in the log file, ~~whereby~~ wherein adjusting the first pointer frees space in the log file for new transactions to be added.

8. (Currently Amended) The method of claim 7, further comprising:
providing a second pointer pointing to a most recently added transaction to the log file;
and
adding a new transaction to the log file by writing information on the new transaction to an address in the log file following the second pointer and adjusting the second pointer to point to the address of the added new transaction, wherein one new transaction cannot be added to the log file if the first pointer addresses a first location in the log file adjacent to [the] a second location addressed by the second pointer.

9. (Currently Amended) The method of claim 8, wherein new transactions are added to sequential addresses in the log file, further comprising:

if the second pointer is at [the] a last address in the log file, then writing information on the new transaction to [the] a first address in the log file and adjusting the second pointer to point to the first address in the log file.

10. (Original) The method of claim 1, wherein access to the resource is provided through a server, wherein the server maintains the log file.

11. (Original) The method of claim 10, further comprising:
redirecting transactions from the determined client to an additional server providing access to another copy of the resource requested by the client transactions.

12. (Original) The method of claim 1, wherein the resource comprises a storage device and wherein the transactions provide updates to data in the storage device.

13. The method of claim 12, wherein the update transactions are provided by a client backup program to backup client data in the storage device.

14. (Currently Amended) A system for managing client transactions from multiple clients, comprising:

a shared resource, wherein the client transactions request access to the shared resource;
a computer readable medium including a log file;
means for logging client transactions in the log file from the multiple clients;
means for determining one client transmitting data at a transmission rate less than a threshold transmission rate; and

means for denying subsequent transactions from the determined client access to the shared resource to provide additional space in the log file for new transactions from ~~additional~~ the clients, other than the determined client, requesting access to the resource.

15. (Currently Amended) The system of claim 14, further comprising:
means for removing all pending ~~transaction~~ transactions of the determined client from the log file.

16. (Currently Amended) The system of claim 14, wherein the clients submit transactions requesting the resource during a session that the clients initiate, further comprising:
means for determining one client session active longer than a threshold time period, wherein the determination of whether the client data transmission rate is less than the threshold transmission rate is made for the determined client whose session is active longer than the threshold time period, and wherein subsequent transactions are denied access to the shared resource for the client having the session active longer than the threshold period of time and having the data transmission rate less than the threshold transmission rate.

17. (Currently Amended) The system of claim 14, further comprising:
means for determining one pending transaction whose access to the resource has completed; and
means for removing the determined pending transaction from the log file.

18. (Original) The system of claim 17, further comprising:
means for determining one client that has transmitted a threshold amount of data, wherein the determination and removal from the log file of pending transactions whose access to the resource has completed is made for all the pending transactions of the determined client that has transmitted the threshold amount of data.

19. (Original) The system of claim 14, wherein an oldest pending transaction logged in the log file is capable of preventing new transactions from being added to the log file.

20. (Currently Amended) The system of claim 14, further comprising:
means for providing a first pointer pointing to an oldest pending transaction in the log file that is capable of preventing new transactions from being added to the log file; and
means for adjusting the first pointer to point to [the] a next oldest pending transaction in the log file if one of the removed transactions is the oldest pending transaction in the log file, ~~whereby~~ wherein adjusting the first pointer frees space in the log file for new transactions to be added.

21. (Currently Amended) The system of claim 20, further comprising:
means for providing a second pointer pointing to a most recently added transaction to the log file; and
means for adding a new transaction to the log file by writing information on the new transaction to an address in the log file following the second pointer and adjusting the second pointer to point to the address of the added new transaction, wherein one new transaction cannot be added to the log file if the first pointer addresses a first location in the log file adjacent to [the] a second location addressed by the second pointer.

22. (Currently Amended) The system of claim 21, wherein new transactions are added to sequential addresses in the log file, further comprising:
means for writing information on the new transaction to the first address in the log file and adjusting the second pointer to point to [the] a first address in the log file if the second pointer is at [the] a last address in the log file.

23. (Original) The system of claim 14, further comprising:
a server providing access to the shared resource, wherein the server includes the computer readable medium including the log file.

24. (Currently Amended) The system of claim 23, further comprising:
an additional server providing access to an additional copy of the shared resource; an
means for redirecting transactions from the determined client to the additional server to
provide the redirected transaction access to the shared resource.

25. (Original) The system of claim 14, wherein the resource comprises a storage
device and wherein the transactions provide updates to data in the storage device.

26. (Original) The system of claim 25, further comprising:
a client backup program, wherein the update transactions are provided by the client
backup program to backup client data in the storage device.

27. (Currently Amended) An article of manufacture for managing client transactions
from multiple clients requesting access to a shared resource in a log file, the article of
manufacture comprising code capable of causing a processor to perform:
logging client transactions in the log file from the multiple clients;
determining one client transmitting data at a transmission rate less than a threshold
transmission rate; and
denying subsequent transactions from the determined client access to the shared resource
to provide additional space in the log file for new transactions from the [additional] clients, other
than the determined client, requesting access to the resource.

28. (Currently Amended) The article of manufacture of claim 27, wherein the code is further capable of causing the processor to perform:

removing all pending ~~transaction~~ transactions of the determined client from the log file.

29. (Currently Amended) The article of manufacture of claim 27, wherein the clients submit transactions requesting the resource during a session that the clients initiate, wherein the code is further capable of causing the processor to perform:

determining one client session active longer than a threshold time period, wherein the determination of whether the client data transmission rate is less than the threshold transmission rate is made for the determined client whose session is active longer than the threshold time period, and wherein subsequent transactions are denied access to the shared resource for the client having the session active longer than the threshold period of time and having the data transmission rate less than the threshold transmission rate.

30. (Currently Amended) The article of manufacture of claim 27, wherein the code is further capable of causing the processor to perform:

determining one pending transaction whose access to the resource has completed; and
removing the determined pending transaction from the log file.

31. (Original) The article of manufacture of claim 30, wherein the code is further capable of causing the processor to perform:

determining one client that has transmitted a threshold amount of data, wherein the determination and removal from the log file of pending transactions whose access to the resource has completed is made for all the pending transactions of the determined client that has transmitted the threshold amount of data.

32. (Original) The article of manufacture of claim 27, wherein an oldest pending transaction logged in the log file is capable of preventing new transactions from being added to the log file.

33. (Currently Amended) The article of manufacture of claim 27, wherein the code is further capable of causing the processor to perform:

providing a first pointer pointing to [an] the oldest pending transaction in the log file that is capable of preventing new transactions from being added to the log file; and

if one of the removed transactions is the oldest pending transaction in the log file, then adjusting the first pointer to point to [the] a next oldest pending transaction in the log file, ~~whereby~~ wherein adjusting the first pointer frees space in the log file for new transactions to be added.

34. (Currently Amended) The article of manufacture of claim 33, wherein the code is further capable of causing the processor to perform:

providing a second pointer pointing to a most recently added transaction to the log file; and

adding a new transaction to the log file by writing information on the new transaction to an address in the log file following the second pointer and adjusting the second pointer to point to the address of the added new transaction, wherein one new transaction cannot be added to the log file if the first pointer addresses a first location in the log file adjacent to ~~the~~ a second location addressed by the second pointer.

35. (Currently Amended) The article of manufacture of claim 34, wherein new transactions are added to sequential addresses in the log file, and wherein the code is further capable of causing the processor to perform:

if the second pointer is at ~~the~~ a last address in the log file, then writing information on the new transaction to the first address in the log file and adjusting the second pointer to point to the first address in the log file.

36. (Original) The article of manufacture of claim 27, wherein access to the resource is provided through a server, wherein the server maintains the log file.

37. (Original) The article of manufacture of claim 36, wherein the code is further capable of causing the processor to perform:

redirecting transactions from the determined client to an additional server providing access to another copy of the resource requested by the client transactions.

38. (Original) The article of manufacture of claim 27, wherein the resource comprises a storage device and wherein the transactions provide updates to data in the storage device.

39. (Original) The article of manufacture of claim 38, wherein the update transactions are provided by a client backup program to backup client data in the storage device.